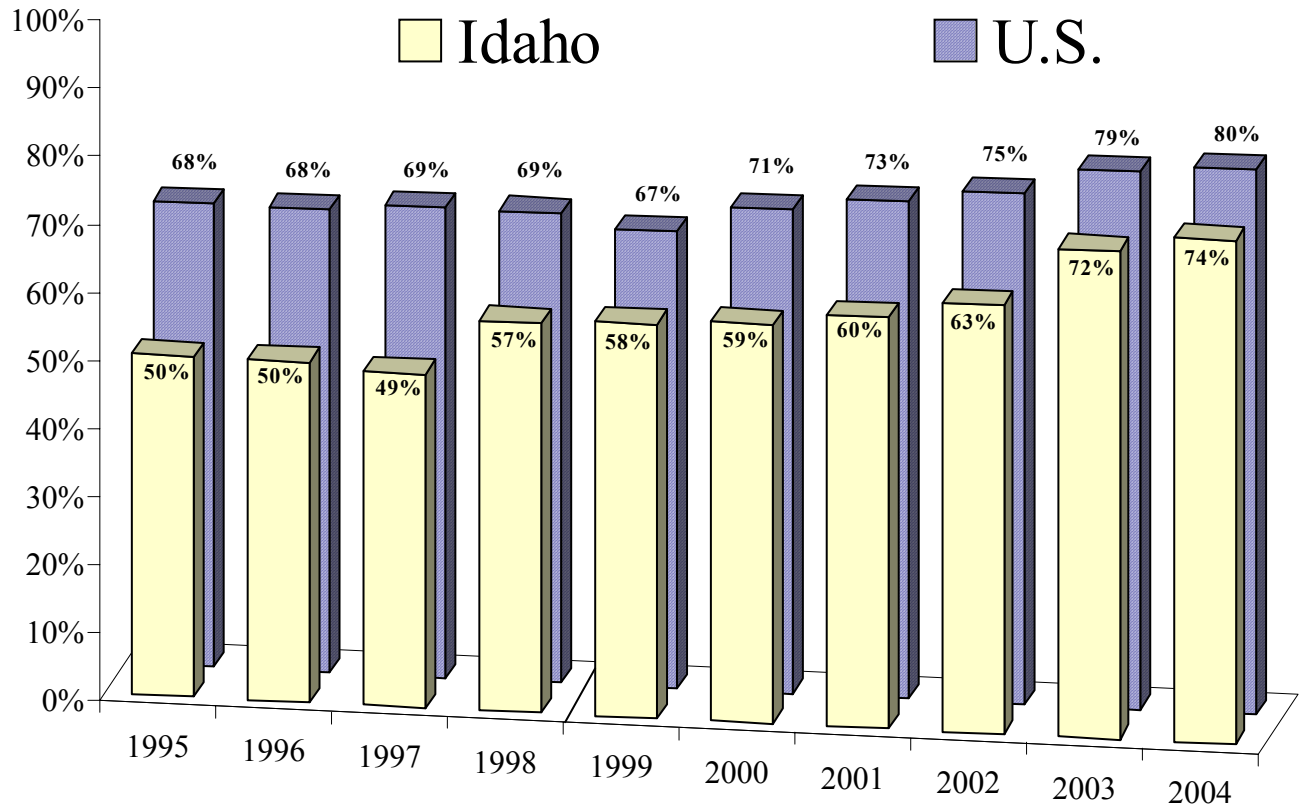
## Safety Restraint Usage

Idaho's seat belt use law, effective July 1, 1986, requires seat belt use for front seat passengers and drivers, regardless of residency, in vehicles with a gross vehicle weight of 8,000 pounds or less that were manufactured with safety belts. The law is a "secondary" law and can only be enforced when someone is stopped for another traffic violation. The law was updated July 1, 2003. It now covers all seating positions and has enhanced penalties for drivers less than 18 years of age. Drivers and occupants, 18 years of age and older, receive separate tickets. Idaho's child restraint law is a primary enforcement law.

Figure 13 depicts observed seat belt use by year for both Idaho and the U.S. The figures are the observed rates for persons in passenger cars, pickups, sport utility vehicles, and vans, which make up 93% of the vehicles involved in motor vehicle crashes. The U.S. usage rate comes from the National Occupant Protection Use Survey (NOPUS) and the mini NOPUS, which are done alternately every year.

Figure 13
**Observed Seat Belt Usage – Idaho vs. U.S.: 1995 - 2004**




The methodology for the observational seat belt survey was changed in 1998 in accordance with the National Highway Traffic Safety Administration (NHTSA) guidelines. Comparisons of 1998 and future surveys to historical data (1986 – 1997 surveys) should be made with caution as the new methodology differs greatly from the previous methodology. Likewise, the methodology for the National survey differs from that of Idaho and does not include any observation sites in Idaho.

## Observational Seat Belt Survey Results

Table 26 shows the observed shoulder harness seat belt use by county.

**Table 26**
**Observed Seat Belt Use by County: 2000-2004**

| | 2000 | 2001 | 2002 | 2003 | 2004 | Change 2003-2004 | Avg. Change 2000-2003 |
|---|---|---|---|---|---|---|---|
| Ada | 63.8% | 66.8% | 64.3% | 81.0% | 85.3% | 5.3% | 9.0% |
| Bannock | 49.5% | 56.0% | 58.5% | 55.7% | 61.2% | 9.7% | 4.3% |
| Bingham | 39.6% | 51.8% | 45.2% | 47.4% | 45.2% | -4.6% | 7.6% |
| Blaine | 38.9% | 52.3% | 60.0% | 68.7% | 68.6% | -0.1% | 21.2% |
| Bonner | 57.2% | 54.4% | 70.9% | 74.4% | 75.3% | 1.2% | 10.1% |
| Bonneville | 56.6% | 63.4% | 62.5% | 59.4% | 72.4% | 21.8% | 1.9% |
| Canyon | 58.3% | 58.3% | 63.2% | 75.1% | 77.9% | 3.7% | 9.1% |
| Cassia | 40.5% | 49.1% | 49.6% | 53.9% | 41.8% | -22.5% | 10.3% |
| Elmore | 55.0% | 57.7% | 52.9% | 67.9% | 70.2% | 3.3% | 8.3% |
| Kootenai | 64.6% | 59.5% | 70.2% | 78.6% | 76.8% | -2.3% | 7.4% |
| Latah | 61.5% | 57.6% | 74.0% | 74.2% | 71.9% | -3.1% | 7.5% |
| Madison | 45.1% | 49.7% | 52.4% | 58.8% | 58.0% | -1.4% | 9.3% |
| Minidoka | 44.3% | 48.1% | 48.5% | 55.6% | 54.2% | -2.6% | 8.0% |
| Nez Perce | 52.3% | 56.2% | 65.4% | 74.4% | 77.6% | 4.3% | 12.5% |
| Payette | 59.6% | 63.3% | 61.2% | 71.9% | 76.1% | 5.9% | 6.8% |
| Twin Falls | 52.6% | 54.4% | 58.9% | 63.0% | 73.2% | 16.2% | 6.2% |
| **Statewide** | **58.6%** | **60.4%** | **62.9%** | **71.7%** | **74.0%** | **3.2%** | **7.1%** |

The Office of Traffic & Highway Safety evaluates compliance rates through analysis of collision data and statewide observational surveys of seat belt use. Observational surveys are conducted by observing shoulder harness use or non-use. The observational survey is a representative sample of the State and does not include all counties.

Table 27 shows the observed seat belt use for the Idaho Transportation Department (ITD) districts[4] by vehicle type. District 3 (south-western Idaho) had the highest overall usage at 82.4%, while district 5 (south-eastern Idaho) had the overall lowest usage at 57.1%.

**Table 27**
**Idaho Safety Belt Observation Survey: 2004 – Usage by Vehicle Type**

| ITD District | Passenger Cars | Vans and Sport Utility Vehicles | Pickup Trucks | All Vehicles |
|---|---|---|---|---|
| **1** | 81.3% | 79.3% | 63.0% | 76.2% |
| **2** | 80.5% | 79.6% | 65.5% | 75.4% |
| **3** | 84.7% | 85.9% | 75.5% | 82.4% |
| **4** | 69.1% | 69.0% | 42.2% | 59.6% |
| **5** | 62.3% | 67.7% | 38.1% | 57.1% |
| **6** | 73.1% | 72.4% | 47.8% | 66.3% |
| **Statewide** | **78.5%** | **79.1%** | **61.9%** | **74.0%** |

Usage rates for the occupants of pickup trucks continue to be significantly lower than usage rates for other types of passenger vehicles. The usage rate for pickup truck occupants in 2003 ranged from a high of 75.5% in District 3 (south-western Idaho) to a low of 38.1% in District 5 (south-eastern Idaho).

Seat belt usage varied by the type of roadway the vehicles were traveling on. It ranged from a high of 91.8% on urban interstates to a low of 37.5% on rural minor collectors.

While there was virtually no difference between urban and rural sites, there was a difference of almost 11 percentage points between major and minor roads. The difference was not statistically significant. Major roads were defined as interstates and principal arterials. Minor roads were comprised of the rest of the roadway functional classifications.

Seat belt use was statistically significantly higher on rural major roads than on both rural minor roads and urban minor roads.

## Self-Reported Seat Belt Usage Results

Table 28 shows the self-reported seat belt use for people, ages 4 and older, in passenger cars, pickups, sport utility vehicles, and vans that were killed or seriously injured. Research has indicated there is a tendency for persons involved in collisions to falsely report compliance with the seat belt law and thus, self-reported use tends to overstate actual use[5]. Seat belt use by severely or fatally injured occupants can be more directly assessed by law enforcement officers or emergency medical personnel, and is therefore, more reliable.

**Table 28**
**Self-Reported Seat Belt Use : 2000-2004**
**(Age 4 and older in Passenger Cars, Pickups, Sport Utility Vehicles, and Vans)**

| Injury Type | 2000 | 2001 | 2002 | 2003 | 2004 | Change 2003-2004 | Avg. Change 2000-2003 |
|---|---|---|---|---|---|---|---|
| Fatalities -Restraints Used | 28.7% | 29.7% | 37.5% | 37.2% | 42.4% | 13.8% | 9.6% |
| Serious Injuries -Restraint Used | 49.7% | 51.0% | 57.6% | 58.4% | 64.7% | 10.8% | 5.6% |

Of the 189 motor vehicle occupants killed in 2004, only 83 were using seat belts. The National Highway Traffic Safety Administration estimates seat belts are 50% effective in preventing fatalities and serious injuries. By this estimate, we can deduce that 83 lives were saved in 2003 by seat belt usage. An additional 53 lives could have been saved if everyone had buckled up.

## Costs of Injuries by Safety Restraint Use

**Table 29**
**2004 Costs of Injuries**
**Persons Using Safety Restraints versus Persons Not Using Safety Restraints (Age 4 & Older)**

| | Safety Restraints | | | Costs of Injuries | | |
|---|---|---|---|---|---|---|
| Injury Type | Used | Not Used | Unknown | Used | Not Used | Unknown |
| Fatality | 83 | 106 | 7 | $266,063,921 | $339,792,478 | $22,439,126 |
| Serious Injury | 873 | 446 | 30 | $193,740,893 | $98,978,738 | $6,657,763 |
| Visible Injury | 2,950 | 854 | 66 | $130,935,998 | $37,904,862 | $2,929,416 |
| Possible Injury | 6,867 | 852 | 193 | $160,862,641 | $19,958,493 | $4,521,114 |
| **Total** | | | | **$751,603,454** | **$496,634,571** | **$36,547,418** |

Self-reported seat belt use is biased because of the penalties involved for not wearing a seat belt (meaning people misrepresent their belt use to avoid a ticket). While 81% of the motor vehicle occupants in crashes said they were wearing seat belts, the observational surveys show only 74% wearing seat belts. The numbers of people using seat belts are higher for the less severe injury categories because of this bias, but also because seat belts lessen the severity of injuries sustained in crashes. Had the occupants that were seriously injured and belted not been wearing a seat belt, they may have been killed.

## Child Safety Seat – Self-Reported Usage

Table 30 shows self-reported child safety seat use for children, under age 4, in passenger cars, pickups, sport utility vehicles, and vans from 2000 to 2004. Overall, the use rate has increased from 82% in 2000 to 87% in 2004. Idaho Code requires every child, under the age of four, and weighing less than 40 pounds be restrained in a car safety seat that meets the federal standards when traveling in a non-commercial motor vehicle manufactured with seat belts after January 1, 1966.

**Table 30**
**Self-Reported Child Safety Seat Use by Injury Type: 2000-2004**
**(under age 4 in passenger cars, pickups, sport utility vehicles and vans)**

| Injury Type | 2000 | 2001 | 2002 | 2003 | 2004 | Change 2003-2004 | Avg. Change 2000-2003 |
|---|---|---|---|---|---|---|---|
| Fatalities | | | | | | | |
| Restrained | 1 | 1 | 1 | 3 | 6 | 100.0% | 66.7% |
| Unrestrained | 0 | 3 | 3 | 2 | 1 | -50.0% | 88.9% |
| Serious Injuries | | | | | | | |
| Restrained | 9 | 5 | 9 | 13 | 3 | -76.9% | 26.7% |
| Unrestrained | 8 | 5 | 7 | 3 | 5 | 66.7% | -18.2% |
| Visible Injuries | | | | | | | |
| Restrained | 35 | 39 | 37 | 30 | 39 | 30.0% | -4.2% |
| Unrestrained | 28 | 29 | 22 | 19 | 12 | -36.8% | -11.4% |
| Possible Injuries | | | | | | | |
| Restrained | 91 | 113 | 139 | 162 | 182 | 12.3% | 21.2% |
| Unrestrained | 42 | 39 | 36 | 49 | 30 | -38.8% | 7.1% |
| No Injuries | | | | | | | |
| Restrained | 1,509 | 1,486 | 1,620 | 1,777 | 1,889 | 6.3% | 5.7% |
| Unrestrained | 383 | 338 | 301 | 283 | 259 | -8.5% | -9.6% |
| Total Restrained | 1,553 | 1,525 | 1,654 | 1,843 | 2,119 | 15.0% | 6.0% |
| Total Unrestrained | 348 | 318 | 280 | 296 | 319 | 7.8% | -5.0% |
| % of Children Restrained | 81.7% | 82.7% | 85.5% | 86.2% | 86.9% | 0.9% | 1.8% |

The National Highway Traffic Safety Administration estimates child safety seats are 69% effective in preventing fatalities and serious injuries. By this estimate we can deduce that a child safety seats may have saved the unrestrained child killed in 2004. Additionally, 3 of the 5 unrestrained serious injuries may have been prevented if they had all been properly restrained.

## Local Safety Restraint Usage

Table 31 presents self-reported restraint use rates for all motor vehicle occupants over the age of 4 involved in fatal and serious injury collisions for each county, comparing 2000 through 2004. Collision data provides an analysis of the restraint use at the local level. This information is self-reported to the investigating officer after a collision. The self-reported use is for all occupants, regardless of injury type, involved in fatal and serious injury crashes.

**Table 31**
**Self-Reported Restraint Use in Fatal and Serious Injury Crashes by County: 2000-2004**
**(persons in passenger cars, pickups, sport utility vehicles and vans only)**

| County by Population | 2000 | 2001 | 2002 | 2003 | 2004 | Change 2003-2004 | Avg. Change 2000-2003 |
|---|---|---|---|---|---|---|---|
| **50,000 and over** | | | | | | | |
| Ada | 70.4% | 70.3% | 77.0% | 75.5% | 83.2% | 10.2% | 2.5% |
| Bannock | 57.6% | 62.3% | 55.6% | 72.1% | 66.7% | -7.5% | 9.0% |
| Bonneville | 61.5% | 59.2% | 63.8% | 68.5% | 73.9% | 8.0% | 3.8% |
| Canyon | 60.7% | 69.4% | 62.2% | 69.5% | 73.5% | 5.7% | 5.3% |
| Kootenai | 63.7% | 73.9% | 77.9% | 82.8% | 80.4% | -2.9% | 9.2% |
| Twin Falls | 59.3% | 56.9% | 81.0% | 61.6% | 73.1% | 18.7% | 4.8% |
| **20,000 - 49,999** | | | | | | | |
| Bingham | 32.2% | 52.2% | 55.1% | 61.0% | 61.2% | 0.3% | 26.1% |
| Blaine | 48.4% | 83.3% | 48.7% | 60.5% | 60.7% | 0.4% | 18.3% |
| Bonner | 54.4% | 45.1% | 62.6% | 80.7% | 64.8% | -19.7% | 16.9% |
| Cassia | 53.6% | 53.3% | 51.0% | 37.7% | 71.1% | 88.5% | -10.3% |
| Elmore | 60.2% | 64.4% | 66.7% | 57.4% | 65.4% | 13.9% | -1.1% |
| Latah | 57.4% | 54.6% | 65.2% | 69.8% | 59.2% | -15.2% | 7.2% |
| Madison | 54.6% | 33.3% | 65.6% | 62.5% | 44.0% | -29.6% | 17.7% |
| Nez Perce | 60.2% | 57.4% | 80.7% | 68.0% | 83.1% | 22.2% | 6.7% |
| Payette | 59.1% | 52.9% | 58.2% | 67.4% | 74.5% | 10.6% | 5.1% |
| **10,000 - 19,999** | | | | | | | |
| Boundary | 50.0% | 55.2% | 73.9% | 50.0% | 85.7% | 71.4% | 4.0% |
| Franklin | 30.0% | 50.0% | 23.3% | 56.3% | 47.8% | -15.0% | 51.5% |
| Fremont | 50.7% | 40.6% | 57.6% | 55.9% | 73.0% | 30.7% | 6.3% |
| Gem | 34.6% | 43.5% | 58.3% | 71.4% | 72.7% | 1.8% | 27.4% |
| Gooding | 55.7% | 38.8% | 55.8% | 51.0% | 55.9% | 9.6% | 1.6% |
| Idaho | 61.2% | 52.4% | 63.4% | 43.8% | 53.2% | 21.7% | -8.1% |
| Jefferson | 59.5% | 44.4% | 57.1% | 59.1% | 56.8% | -3.9% | 2.2% |
| Jerome | 58.8% | 48.8% | 55.5% | 66.7% | 73.6% | 10.4% | 5.6% |
| Minidoka | 42.9% | 34.9% | 48.3% | 62.5% | 66.2% | 6.0% | 16.4% |
| Owyhee | 65.0% | 26.7% | 46.3% | 23.5% | 53.1% | 125.8% | -11.5% |
| Shoshone | 51.2% | 50.0% | 59.1% | 47.4% | 76.5% | 61.4% | -1.3% |

**Table 31 (Continued)**
**Self-Reported Restraint Use in Fatal and Serious Injury Crashes by County: 2000-2004**
**(persons in passenger cars, pickups, sport utility vehicles and vans only)**

| County by Population | 2000 | 2001 | 2002 | 2003 | 2004 | Change 2003-2004 | Avg. Change 2000-2003 |
|---|---|---|---|---|---|---|---|
| **5,000 - 9,999** | | | | | | | |
| Bear Lake | 16.0% | 57.1% | 66.7% | 29.4% | 72.7% | 147.3% | 72.6% |
| Benewah | 18.8% | 40.0% | 43.2% | 60.0% | 63.2% | 5.3% | 53.4% |
| Boise | 65.9% | 72.7% | 64.0% | 64.1% | 61.4% | -4.3% | -0.5% |
| Caribou | 66.7% | 52.2% | 47.5% | 21.4% | 50.0% | 133.3% | -28.5% |
| Clearwater | 21.4% | 37.5% | 81.8% | 44.4% | 78.6% | 76.8% | 49.2% |
| Lemhi | 15.2% | 46.7% | 60.5% | 53.3% | 83.3% | 56.3% | 75.3% |
| Power | 31.0% | 42.3% | 48.0% | 65.0% | 56.3% | -13.5% | 28.4% |
| Teton | 37.5% | 35.7% | 45.5% | 81.8% | 0.0% | -100.0% | 34.2% |
| Valley | 41.7% | 51.9% | 71.4% | 62.9% | 60.0% | -4.5% | 16.7% |
| Washington | 38.5% | 54.6% | 71.4% | 96.2% | 33.3% | -65.3% | 35.8% |
| **0 - 4,999** | | | | | | | |
| Adams | 11.1% | 33.3% | 92.3% | 58.3% | 40.0% | -31.4% | 113.4% |
| Butte | 28.6% | 33.3% | 88.9% | 71.4% | 50.0% | -30.0% | 54.6% |
| Camas | 33.3% | 81.8% | 100.0% | 50.0% | 20.0% | -60.0% | 39.2% |
| Clark | 69.2% | 75.0% | 36.4% | 60.0% | 100.0% | 66.7% | 7.3% |
| Custer | 20.0% | 55.0% | 45.0% | 37.5% | 52.6% | 40.3% | 46.7% |
| Lewis | 42.3% | 80.8% | 90.0% | 57.1% | 62.5% | 9.4% | 21.9% |
| Lincoln | 66.7% | 18.2% | 42.1% | 36.4% | 90.9% | 150.0% | 15.1% |
| Oneida | 60.7% | 64.3% | 45.5% | 64.0% | 55.2% | -13.8% | 5.8% |
| **Statewide Average** | **58.3%** | **60.7%** | **65.7%** | **67.6%** | **72.1%** | **6.6%** | **5.1%** |